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ABSTRACT

In a controlled experiment, the IIEP attempted to develop efficient teaching materials in the field of educational planning. Informal instructional materials were compiled from the tape recordings, transcriptions, and summary notes of seminars, lectures, and discussions conducted by the IIEP in its training and research program. This instructional unit discusses the role of budgeting as a method for rational management. The author concludes that a planning programing budgeting system (PPBS) is the most efficacious management tool currently available since it brings together the activities associated with planning, budgeting, and alternatives appraising. Related documents are EA 003 931-935 and EA 003 937-942. (RA)

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No. 44 THE ROLE OF BUDGETS IN EDUCATIONAL PLANNING

by Jacques Hallak

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THE ROLE OF BUDGETS IN EDUCATIONAL PLANNING

by

Jacques Hallak

This lecture is part of "Fundamentals of Educational Planning; Lecture-Discussion Series" a controlled experiment undertaken by the International Institute for Educational Planning in collaboration with a limited number of organizations and individuals aiming at the development of efficient teaching materials in the field of educational planning. By their very nature these materials, which draw upon tape recordings, transcriptions and summary notes of seminars, lectures and discussions conducted by IIEP as part of its training and research programme, are informal and not subject to the type of editing customary for published documents. They are therefore not to be considered as 'official publications'.

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The role of budgets in educational planning

A significant characteristic of planning in developing countries is the relative importance of the public sector; this is even more true for educational planning where the growth of the public sector is a dominating factor in the development of educational systems.

As details of public sector programmes are included in the budgets of the government and local authorities, and since educational planning is primarily concerned with formulating objectives for action, it would therefore be only logical to expect that the budgetary activity should play a major role in planning, programming and controlling educational costs during the planned period. As a matter of fact, a draft plan is only a blueprint for action, whilst budgetary activity is mainly operational in nature. This means that the budget should be so devised as to highlight the truly operational characteristics, both physical and financial, of any given programme. Such is however unfortunately not the experience of many developing countries; with a consequence that the operational character of what we may call 'traditional budgets' and their links with planning are largely obscured.

1. Traditional budgets

An annual budget constitutes the principal instrument with which the national authorities of a country express their priorities for government action. Ideally, one would like to identify an annual budget with a one-year plan; but, however, since planning consists in exploring the future, analysing the means to attain certain targets and deciding on programmes with a view to achieving them, while the preparation of a budget is usually determined by the situation of the moment, it is clear that one-year plans and budgets may co-exist in a country and may prove to be somewhat contradictory.

In a majority of countries, budgeting is conceived largely in financial terms. The financial accountability to the legislature is usually the overriding consideration and this permeates the entire budgetary process. The budget is traditionally thought of as a tool with which to control and distribute the flow of the actual financial resources of a state. The emphasis is placed mainly on the observance of appropriation limits. In many respects, it is better adapted to the requirements of a financial comptroller concerned with preventing fraud and dishonesty, than to those of a manager or administrator responsible for making well-founded decisions for the use of public funds.

The classification of budgetary expenditures rarely enables identification of programmes or projects(1); furthermore, and it is only infrequently related to the cost of major inputs or educational services performed. To give the case of Ceylon as an illustration, cost analysts can neither isolate the cost of specific educational programmes or projects, nor can they estimate the budgetary unit cost of primary and secondary education separately. In other words, the traditional system of budgeting does not provide information on what a government is actually doing and what it gets for the money spent. Of course, it may be possible to compile such information from departmental reports or other supplementary documents, but in many cases this information cannot be directly linked with cost and finance data as they appear in a budget or in audited accounts, because it does not constitute a basis for budget management. The absence of pertinent information of this type reduces the usefulness of such a traditional budgetary approach even for purposes of legislative review and appropriation.

Yet, even in their traditional forms, budgets can play an important role in the development of plans in general and in educational plans in particular. The basic reason is that it has increasingly become the custom to express the consequences of educational plans in budgetary terms. It is therefore particularly tempting to consider the budget as the most appropriate tool for controlling the implementation of the plan through the programming of its costs and the insuring of annual appropriations of funds needed.

Let us take two examples from socialist countries: USSR and Hungary. In spite of traditional types of budget, these two countries make extensive use of norms, standard and unit costs in budgeting and programming their educational plans to the extent that their annual budget is considered as the most appropriate tool for the execution of the plan. In Hungary, for instance, each year during the preparation of the educational budget, the detailed planned costs of the five-year plans serve as a basis for estimating the budgetary allocations. Small adjustments of plan targets might occur due to budgetary constraints unforeseen in the plan.

In practice, the role of the budget will depend on several factors, the most important of which are the following:

Imperative or indicative planning

The degree of flexibility of educational plans will be directly reflected in the educational budget. As we have seen in the case of a country like Hungary, the annual budgets are the financial expression of the implementation of the plans, and will thus enable regular appraisals to be made of the extent to which the long-term forecasts have been realized.

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(1) A specimen estimate for Ceylon is given in Table 1.

Table 1. A specimen estimate for Ceylon

Estimates, 1968-69

Head 145. Minister of Education and Cultural Affairs, Vote No. 4		
Elementary Education	Rs.	Rs.
Expenses connected with the Paddy Weeding Programme and Works Experience		687,000
Secondary Education		
Maintenance of and Improvements to Maha Vidynlayas and Madhya Maha Vidyalayas		1,100,000
(Maintenance, repairs and improvements and minor construction including water service and drainage latrines and wells)		
Apportionment No. 1. Head Office	1,100,000	
Library Books and Periodicals		400,000
Apportionment No. 1. Head Office	400,000	
General School Expenses		690,800
Apportionment No. 1. Head Office		
Item (1) Requisites for teaching of science	250,000	
(2) Requisites for teaching of art	15,000	
(3) Supply of blackboard instruments	6,300	
(4) Supply of chalk, stationery and other miscellaneous consumable stores		
(a) Chalk	100,000	
(b) Stationery	100,000	
(5) Supply of other school equipment, globes, maps, etc.	50,000	
(6) Supply of minor consumable articles to the College of Music and Dancing and Ballet	8,000	
(7) Supply of simple medicines	1,500	
(8) Repairs to furniture and other school equipment	160,000	
	690,800	
Vocational Education		50,000
Apportionment No. 1. Head Office	50,000	

Specimen page from 'The Estimates of the Revenue and Expenditure of the Government of Ceylon for the Financial Year 1 October 1968 to 30 September 1969', Appropriation Act No. 38 of 1968.

In countries where educational plans remain mainly indicative or not fully comprehensive, the significance of the budget figures is not so important as the amounts actually budgeted during the plan period do not necessarily correspond to a definite degree to the achievement of the educational target. These targets may prove to be more or less costly to attain, the only significant way to control their implementation should be based on physical data. Such data does not appear in traditional budgets.

Conversion of targets of the plan into specific projects

A sound and reliable plan should always be converted into definite projects of construction and development (creation of new staff posts, etc.). Each project having been costed carefully, and the budget should be drawn on the basis of these items. In this way, the budget can have a significant role to play in making available the funds necessary for actually achieving the targets. To a certain extent, this is what has happened with the present educational plan in Tanzania; although the large proportion of external aid expected in the financing of the plan has been a major cause of the difficulties found in reaching the targets.

Proportion of public sources of financing

In several developing countries, foreign aid contributes a significant share of the financing of the educational plan. Under these circumstances, the national budget covers only a fraction of the planned programmes. On the other hand, in countries where external aid plays a minor role - everything being equal - the budget will obviously play a larger role in the execution of the plan.

Systems of financing education

In federal types of countries, with decentralized methods of financing, state and local authorities budgets can really be the key tools for programming and controlling educational costs, since federal government budgets are to a large extent more general and also cover only a very minor proportion of educational costs. On the other hand, in countries with a centralized system of financing education, the national budgets which bear the greater part of the financial burden should be made more effective instruments for the implementation of educational plans.

Relations between Ministries of Education, Planning and Finance

It is not an exaggeration to say that the administrative organization of inter-ministerial committees for the preparation of educational plans has a very considerable effect on action taken with regard to the programmes set up for the period covered by the plan.

If the educational plan is prepared by a specialized group which has no contact with the Finance Ministry, whether the group belongs to the Ministry of National Education or to a Planning Commission, difficulties will arise at the execution stage of the plan. The annual budgets may appear as if they had been established quite independently from the forecasts made in programming the plan. With such possibilities frequently occurring it is necessary to give the planning service a certain degree of superiority over the budget service as soon as the principle of planning has been accepted.

In short, the national budget can play a role of greater or lesser importance in the service of the educational plan according to the country, and the circumstances and characteristics of the planning system itself. It can stimulate the fulfilment of the educational plan by financing of a discretionary character, specifying programmes to be carried out and assigning them an order of priority. It may, in some cases, be the essential instrument for the execution of the educational plan. In all events, both as a 'watch dog' and as a yardstick for measuring the fulfilment of the planned programmes, the budget is undoubtedly an indispensible complement to the educational plan.

2. The need for new approaches in budgeting

With the generalization of planning procedures and the ever more striking manifestation of an imperative need for a more rational management of public finance, the question arises as to whether budgets of the traditional type can continue to play an entirely satisfactory role in the implementation of educational plans.

How indeed can the achievement of quantitative and qualitative educational targets be measured unless the means to attain them are explicit and are annually programmed? Can the budget be the instrument of execution of the plan if alterations and reorientations of existing programmes, annually decided upon in small doses (since 'new measures'(1) rarely constitute more than 10 per cent of the national budget) are not systematically planned in all the budgets of the plan period?

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(1) 'New measures' and 'services voted' are the terminology used in the French budgets, but they correspond to budgetary concepts admitted in all countries.

Finally, the traditional budget methods which:

(a) distinguish requirements and funds by balancing them one against another;

(b) programme the requirements in annual slices and allocate the funds to administrative services compartmented according to the nature of their activities;

(c) exclude to some extent the necessary close reference between the investment expenditure of one year and the operating costs ensuing during succeeding years;

(d) thereby prevent any comprehensive and comparative appraisal of the total cost of an investment;

obviously do not entirely meet the informational requirements dictated by the desire for a rationalization of national options - a role which it would be desirable to attribute to the budgets.

As a matter of fact in 1962 the United Nations Secretary-General in his report on 'The United Nations Development Decade: Proposals for Action' stated:

> "The budgetary systems of many developing countries have failed to keep pace with the new demands made on them by the greatly increasing scope of activities of the public sector and, in particular, by the adoption of a planned approach to economic development. Thus, the need is first for the development of new types of information on the public sector essential for drawing up long-term development plans, and second for changes in concepts and procedures in government budgeting required to make the annual budget an effective instrument for implementing the development plans and policies".(1)

In response to the need for correcting this situation, several attempts for improving budgetary activity have been made:

At the school level, management considerations and the need for cost analysis have led to introducing in a few countries (U.S.A., Canada, etc., but also Uganda, Thailand, etc.) of functional breakdown of the budget items, distributing the expenditures by purpose and type through a uniformized system of accounting.

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(1) UN publications, Sales No. 62 II B 2, p.112.

At the national level, with a view to completing the information provided by the traditional budgets, an effort to group the expenditures by major functions (broad grouping of operations that are directed towards accomplishing a major purpose of government) has been initiated in some countries. A function may be defined as a major division of the total organized effort of the government which identifies district and separate services provided to the public - such as education, health, agriculture, etc.(1) A classification of this kind, which may be common among various countries, provides helpful information on purposes served by governmental expenditures, irrespective of the organization making the expenditure. This is accomplished by grouping programmes and activities of organization according to the basic services provided, each of which has significance from the standpoint of the duties and responsibilities of the government as a whole. Thus, a functional classification can show the share of public budget devoted to education and other public services. In this respect, it is most useful for formulation, review and implementation of broad policy objectives, and therefore of primary interest for top-level legislature and executive review.

It is nonetheless true that although it helps to rationalize decisions, the functional budget does not direct action because it does not enable a clear connexion to be established between the functional category and the programme to be put in hand. Nor does it provide data on the nature of proposed work, its relation to policy objectives, planned performance and its cost. This is despite a definite tendency among those responsible for preparation of such budgets to use functional and subfunctional categories for segregating governmental expenditures according to the immediate or short-term purposes served.

In their present structure, therefore, functional budgets do not seem to meet all the needs arising from the generalization of planning procedures and the desire for the rationalization of the management of public funds.

The use of programme and performance budgeting developed essentially in response to the call for improving this situation; it is intended to highlight management consideration in budgeting and in so doing to bring out the most significant economic, financial and physical aspects of the budgetary activity.(2)

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(1) As an illustration, Table 2 gives the breakdown of the French Budget, by function.

(2) Such a system was introduced in a few countries among which the Philippines; in the U.S. this system has been given the name of 'performance budget'.

The programme and performance approach to budgeting is based principally on the use in budget management of three sets of interrelated considerations: (i) meaningful 'programmes' - broad categories that identify the end products of major organizations - and 'activities' - segments of a programme that identify homogeneous types of work carried out by subsidiary organizations to produce the end products of a programme - are established for each function entrusted to an organization or an agency in order to show precisely the work objectives of various agencies; (ii) the system of accounts is brought into line with this classification; (iii) under each programme and for its operational subdivisions, action is taken to establish programme and work measures that are useful for evaluation and performance.(1) This involves establishing an appropriate relationship between long and short-range plans and identifying that segment of the plans that is proposed to be implemented in the annual budget.

Table 2. Functional distribution of public expenditure in France

	Index for 1965 (1964=100)	Percentage of total budget expenditure 1964	1965
General administration and public powers	107.2	9.2	9.2
National defence	105.2	20.7	20.3
Foreign and overseas	95.9	4.5	4.0
Education and culture	113.3	17.3	18.2
Social services	105.9	14.3	14.1
Economic services	106.8	23.3	23.1
Housing, urban development and land improvement	114.7	5.7	6.1
Public debt and non-functional expenses	108.9	5.0	5.0
	107.5	100.0	100.0

Source: The French Republic. Budget for 1965. Ministry of Finance and Economic Affairs, Directorate of the Budget, Paris, Imprimerie Nationale (Government Printing Office), 1965.

(1) Units of work measurements in selected programmes in the Philippines are included for illustrative purposes in Table 3.

Thus, to a large extent, a programme and performance budget can respond to such key questions as: What is the purpose of doing a specific thing? What is the cost of doing it, and how far have the programme objectives been accomplished?

Yet the programme and performance budget, in spite of its degree of refinement and sophistication, is still no more than a descriptive tool for the scope of action of the government, insofar as it does not aim at examining alternative means for reaching the targets, nor does it suggest the main programmes or projects to be adopted by the public authorities.

The Planning-Programming-Budgeting System

An important reform which is taking place in several countries aims at improving the efficiency with which the public funds earmarked for national objectives are utilized. This reform originates from planning, but has developed of its own accord, especially in the United States. It is already being applied in Canada, France and other countries.

To use the expression of William Gorham(1), the reform has 'an overwhelmingly long title': Planning-Programming-Budgeting Systems.

Planning: This is an attempt to determine by means of forward-looking research the full range of long-term targets for which the various departments of a government recognize their responsibility. By 'long-term targets' is meant here the strategic objectives in a timetable which varies according to the case.

Programming: This term involves the definition of the material, financial and human resources which are best adapted to the successive achievement of the targets, that is to say the working out of the medium-term programmes which are the usual components of an overall plan. Programming implies a comparison of alternative means for attaining a given target with a view to selecting the best of these means.

Budgeting: This is the conversion into budgetary terms of annual proportions of the accomplishment of the programmes with allowance for short-term financial restraints.

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(1) William Gorham was until May 1968 Assistant Secretary in the Department of Health, Education and Welfare in the Government of the United States.

Table 3. Units of work measurement in selected programmes: the Philippines

Function	Organization	Programme	Project	Unit of work measurement
General Government	Bureau of Internal Revenue	Administration and enforcement of internal revenue laws, special tax laws and regulations	1. Tax rulings and other legal services	Rulings issued
			2. Tax assessment	(a) Tax returns processed and/or assessed (b) Tax cases processed and/or assessed (c) Tax investigations conducted
			3. Tax collection	Cases closed
			4. General administration	General administrative employment ratio; general administrative expense per man-year
Education	Bureau of Public Schools	Vocational education	1. Trade and industrial education	Students enrolled
			2. Agricultural education	Students enrolled
			3. Fishery education	Students enrolled
			4. Philippine nautical school	Students enrolled
			5. Training in home industries	Trainees enrolled
	Bureau of Public Libraries	Library and archives administration	1. Library extension service	Patrons served
			2. National library service	(a) No. of books etc. catalogued, classified and processed (b) Patrons served (c) Indexing entries
			3. General administration	General administrative employment ratio and expense per man-year
Health	Field operations	Field health services	1. Rural health units	Units operated
			2. Dental services	Patients attended
			3. Social hygiene services	Number of cases handled
			4. Malaria eradication services	(a) Persons protected (b) Research activities
			5. Tuberculosis control services	Persons attended
			6. Environmental sanitation	Inspections conducted

	Hospital services	1. Operation of general hospitals	Number of free beds
		2. Operation of special hospitals	Patient days (a) Maternity (b) Children (c) Mental (d) Orthopedic (e) Communicable diseases
		3. School of nursing	Persons trained
		4. School of midwifery	Persons trained
		5. Aid to puericulture	Narrative statement of purpose of aid
		6. Laundry plant	Number processed
Bureau of Laboratories and Research	Laboratory examination production and research	1. General management	Administrative employment ratio and expense per man-year
		2. Pathological and macrobiological examination	Number of examinations performed
		3. Laboratory research	Number of research studies conducted
		4. Blood plasma dehydration	Cubic centimetres of blood products
		5. Sanitary chemical analysis	Number of examinations performed
		6. Vaccine production	Cubic centimetres manufactured
		7. Food and drug analysis	Number of examinations performed

Concretely, the procedure consists of the following actions:

- for countries already using planning - the application of a technique for improving the preparation of the plan by a rational choice of programmes and for ensuring their implementation by the adoption of a programme budget for each year of the planning;

- for countries originally not using planning - first, the establishment and application of medium-term plans for each governmental function, to be revised and brought up to date every year, and second, the use of the first year of the plan as the framework for the next budget, it being evident that the preparation of the annual budget will necessitate more rigidity in the plan.

In other words, in the first case the budget is rationalized by being placed at the service of the plan and in the second case the plan is established for the improvement of the budget.

Whichever course is followed, working out a PPBS is an operation which takes a great deal of time in itself. It involves the establishment of a system of budget classification which collates programmes and allocations according to the principal targets, functions, and groups that benefit from them. The code of reference adopte should also serve to classify items according to the administrative agency responsi budget assignment, method of financing and legislative status. In France, for exam operations aimed at classifying the activities and expenditures of a ministry in te of programme headings have been undertaken in only a few ministries (principally the Ministry of the Armed Forces and the Ministry of Agriculture). In the United State the reform of the budget classification system was introduced into all government departments in 1965. By way of illustration only, the table shows the reference co and programme categories adopted for education.(1) It is important to note that an category given at a particular level may appear in combination with any category of another level. For example, a programme having as its objective 'General research' (level 2, category 5) may include one or more programme targets of level 3.

(1) Comment on the categories in Table 4:

Level 1: Education - A programme having as its objective to aid the developme of individual aptitudes and attitudes by regular training and education.

Level 2: Purposes of education - A statement of the deeper reasons for educat explained in general terms.

Levels 3 and 4: Statement of special objectives of the federal government act from the standpoint of the major sectors of the population concerned and according the nature of this aid. Through the various combinations of categories 3 and 4 can found the motives for federal aid and the channels through which the federal govern ment assists the states and local governments to achieve the principal objects of education.

Table 4. Coding and classification by categories of the material and financial plan of the U.S. Department of Health, Education and Welfare

Code	Level	Categories
	1	Major program
1 _ _ _ _ _ _		Education
	2	Purposes of education
1 1 _ _ _ _ _		Development of natural aptitudes and basic behaviors
1 2 _ _ _ _ _		Development of technical and vocational aptitudes
1 3 _ _ _ _ _		Development of university and graduate aptitudes
1 4 _ _ _ _ _		Development of the individual in the community
1 5 _ _ _ _ _		General research (research not assignable)
1 6 _ _ _ _ _		General administration (salaries and expenditures of the Office of Education which cannot be assigned to any of the above categories)
	3	Program targets
1 _ 1 _ _ _ _		To increase the education of the general population
1 _ 2 _ _ _ _		To increase the education of the under-privileged
1 _ 3 _ _ _ _		To increase the education of the handicapped
1 _ 4 _ _ _ _		To improve knowledge about other countries
1 _ 5 _ _ _ _		Others
	4	Features of programs
1 _ _ 1 _ _ _		Increases the resources of the school system
1 _ _ 2 _ _ _		Improves the quality of the teaching system
1 _ _ 3 _ _ _		Develops and introduces new methods
1 _ _ 4 _ _ _		Collects and improves educational statistics
1 _ _ 5 _ _ _		Favors equal opportunities for education (Civil Rights)
1 _ _ 6 _ _ _		Acts upon the social environment
1 _ _ 7 _ _ _		Others

As Novick said(1):

"The PPBS method is to set forth certain major objectives, to define programmes essential to these goals, to identify resources to the specific types of objectives and to systematically analyse the alternatives available".

This means that the PPBS system implies a thorough systems analysis leading to choosing the 'preferred mix' of a set of proposed projects which cannot all be undertaken. Such decisions present very complex problems and require first qualitative discussion of some of the more relevant non-quantifiable issues involved in the decision: e.g. political factors, non-quantifiable 'spillover' effects and the like, and second the adoption of a set of quantifiable selection criteria to which the costs and advantages of competitive programmes can be compared.(2)

The option stage can be regarded in more than one way, and the criteria will naturally vary according to the viewpoint adopted. It is clear that programme analysis for the purpose of rationalizing budget choices can never take into account all the possible consequences of the adoption of a given programme. To accomplish that, it would be necessary to establish a 'national satisfaction function' by which for example, the respective consequences of the assignment of the same amount of funds to education and to defence could be measured. Such a high level of decision-making dealing with major matters of allocation must be (and are) based primarily on intuition and judgment.

Analysis will be more helpful if it is to provide solutions for decisions on a somewhat lower level, these solutions in turn might provide valuable information for higher-level decisions. It is on these somewhat lower decision levels (technically called 'suboptimization') where the analytical studies are likely to have the highest payoff. This is incidentally one of the advantages of PPBS insofar that it leads to increased possibilities of decentralization and to the creation of incentives for efficiency.

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(1) 'Origin and History of Program Budgeting', The Rand Corporation, Santa Monica, California, October 1955 p. 3,427.

(2) Taking as an example decisions to be made among alternatives proposed for water resources projects, G.H. Fisher from the Rand Corporation has established Table 5 as a frame of a summary of results of such systems analysis. (The Analytical Bases of Systems Analysis, May 1966).

Table 5. The use of systems analysis in choosing the preferred mix project

Analytical factor	Proposed projects 1	2	3	4	...	n
(1) Present worth(a) ($):						
(a) Discounted at 2 1/2% (50 yr.)						
(b) Discounted at 5% " "						
(c) Discounted at 8% " "						
(2) Possible variability of outcome:						
(a) 'Most likely' range of present worth (low-high $)						
(b) Range of present worth outside of which outcome is 'very unlikely' to fall						
(3) Effect on personal wealth distribution:						
(a) Number of farms affected						
(b) Average value of land and buildings per farm in the watershed ($)						
(c) Average net benefit per farm owner ($)						
(4) Effect on regional wealth distribution:						
(a) Average increase in per family income in the Basin ($)						
(b) Percentage increase in average income in the Basin due to project						
(5) Internal rate of return of project (%)(b)						

(a) Present value of estimated benefits minus present value of estimated costs.

(b) The rate of discount which reduces present worth to zero.

To come back to the selection criteria, there are numerous techniques used; for instance cost-effectiveness, cost utility and cost-benefit analysis. The advantages and the limitations of such techniques are dealt with elsewhere. However, two remarks should be made here:

(i) Whatever the technique used, it implies careful cost analysis of of projects and programmes to be budgeted; in this respect, a prerequisite for the application of PPBS is the availability of sufficiently detailed cost estimates for carrying out a thorough cost analysis.

(ii) The weaknesses of any quantitative selection criteria, particularly in respect to the educational budget, are such that they become probably the most serious obstacle to overcome in the generalization of PPBS. It can be admitted that in the social budget of the nation as a whole, and in the educational budget in particular, the problem of selection is not necessarily solved when the most economically efficient programmes have been determined. The 'redistributive' function of educational budgets prevents us from giving priority in decision-making to the criterion of economic efficiency. We are faced with a contradiction between the efficiency criterion and the social justice criterion and the question 'Who will benefit from this or that programme?' can weight more heavily in some cases than the question 'Which of these programmes has the highest rate of return?'.

The PPBS is a method which covers, in theory, a very wide field since it brings together the planning, the budgeting, and the rational appraisal of the possible options. In fact, however, PPBS is not a substitute for overall planning since it cannot, in the present 'state of the art', integrate coherently the full range of the nation's activities; and, further, in view of the difficulty of establishing selection criteria, it does not yet provide by itself final solutions to questions of budgetary choices.

On the other hand, PPBS undoubtedly marks an advance by its attempt to clarify the management of public affairs by its encouragement of rigid programming of the operations included in the plan, and by its effect as a catalyst and stimulant of research on the criteria of selection. PPBS involves a better analysis of the consequences of the targets proposed by the planners, and thus in turn affects the choice of these targets.

Should we therefore conclude that the use of PPBS should be generalized in all developed and developing countries? To pronounce upon the value and the advisability of applying PPBS to the education sector obviously involves a political choice. To mention only the technical aspects of the introduction of this method, it can be said that it would require the forming of teams at a high level in each department or ministry of the government simply in order to put it into practice, and it would also presuppose a decentralization of the decision-making process at each government level, with due respect for standards and criteria admitted by all. Furthermore it would call for a complete change in the state of mind and in the traditional relationships existing between the budget services and the spending departments. In other words, an essential preliminary to the introduction of PPBS in the educational sector must be a retraining of authorities and officials and a reappraisal of the traditional relationships between budgeting and educational planning. On these grounds, at least, therefore it merits examination and consideration by educational planning authorities.